

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

AFFYMETRIX, INC.,	)	
	)	
Plaintiff,	)	C.A. No. 04-901-JJF
	)	
v.	)	
	)	
ILLUMINA, INC.,	)	
	)	
Defendant.	)	

**AFFYMETRIX'S PROPOSED FINAL JURY INSTRUCTIONS**

Pursuant to D. Del. L.R. 51.1(a), Affymetrix, Inc. submits the attached Proposed Final Jury Instructions, in triplicate. The parties have reached agreement with respect to certain additional instructions, which have been submitted jointly in a separate document. The parties have agreed to continue to confer and attempt to reach agreement on additional instructions once it is determined what issues in the case will be tried together. These instructions are also being submitted on disk in WordPerfect format.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/ Derek J. Fahnestock (#4705)

Jack B. Blumenfeld (#1014)

Maryellen Noreika (#3208)

Derek J. Fahnestock (#4705)

1201 N. Market Street

P.O. Box 1347

Wilmington, DE 19899 (302) 658-9200

Attorneys for Plaintiff Affymetrix, Inc.

## **1. GENERAL INSTRUCTIONS**

### **1.1 INTRODUCTION<sup>1</sup>**

SEE JOINT PROPOSED INSTRUCTION NO. 1.1<sup>2</sup>

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<sup>1</sup> Source: Final Jury Instructions *Power Integrations, Inc. v. Fairchild Semiconductor Internat'l Inc.*, C.A. No. 04-1371-JJF (October 6, 2006) (hereinafter "*Power Integrations* Final Instructions"); Uniform Jury Instructions For Patent Cases In The United States District Court For The District Of Delaware (March 1993) (hereinafter "Delaware Uniform Instructions").

<sup>2</sup> The parties joint proposed jury instructions are being submitted as a separate document contemporaneously herewith.

**1.2 JURORS' DUTIES<sup>3</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.2

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<sup>3</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

### 1.3 BURDEN OF PROOF<sup>4</sup>

This is a civil case in which Affymetrix, Inc. is charging Illumina, Inc. with infringement of five Affymetrix patents. Affymetrix has the burden of proving patent infringement and its claim of damages by what is called a preponderance of the evidence. That means Affymetrix has to produce evidence which, when considered in light of all of the facts, leads you to believe that what Affymetrix claims is more likely true than not. To put it differently, if you were to put Affymetrix's evidence and Illumina's evidence on the opposite sides of a scale, the evidence supporting Affymetrix's claims would have to make the scales tip somewhat on Affymetrix's side. If Affymetrix fails to meet its burden for a particular claim, your verdict must be for Illumina on that claim.

In this case, Affymetrix is also alleging that Illumina's infringement was willful. Affymetrix must prove its claims of willful infringement by clear and convincing evidence. Clear and convincing evidence is evidence that produces an abiding conviction that the truth of a fact is highly probable.

Those of you who are familiar with criminal cases will have heard the term "proof beyond a reasonable doubt." That burden does not apply in a civil case and does not play any part in this case. Therefore, you should not consider it at all in your deliberations.

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<sup>4</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**1.4 EVIDENCE DEFINED<sup>5</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.4

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<sup>5</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**1.5 CONSIDERATION OF EVIDENCE<sup>6</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.5

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<sup>6</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**1.5.1 USE OF NOTES<sup>7</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.5.1

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<sup>7</sup> Source: *Power Integrations* Final Instructions.

**1.6 DIRECT AND CIRCUMSTANTIAL EVIDENCE<sup>8</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.6

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Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.



**1.7 CREDIBILITY OF WITNESSES<sup>9</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.7

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<sup>9</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**1.8 NUMBER OF WITNESSES<sup>10</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.8

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<sup>10</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

## **1.9 EXPERT WITNESSES<sup>11</sup>**

When knowledge of technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field – he is called an expert witness – is permitted to state his opinion on those technical matters.

You are not required, however, to accept that opinion. As with any other witness, it is up to you to decide how much weight to give the opinion in light of all the evidence in the case.

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<sup>11</sup> Delaware Uniform Instructions.

**1.10 DEPOSITION TESTIMONY<sup>12</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.10

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<sup>12</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**1.11 DEMONSTRATIVE EXHIBITS<sup>13</sup>**

SEE JOINT PROPOSED INSTRUCTION 1.11

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<sup>13</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

## **2. THE PARTIES AND THEIR CONTENTIONS**

### **2.1 THE PARTIES**

The plaintiff in this case is Affymetrix, Inc. The defendant is Illumina, Inc. I will refer to the plaintiff as “Affymetrix”. I will refer to the defendant as “Illumina”.

## **2.2 AFFYMETRIX'S CONTENTIONS**

Affymetrix contends that Illumina has directly infringed and continues to directly infringe various claims of Affymetrix's five patents. Affymetrix also contends that Illumina has indirectly infringed its patents. I will explain the elements of both direct and indirect infringement shortly. Specifically, Affymetrix charges that Illumina has infringed, and continues to infringe: [list asserted claims<sup>14</sup>]

I will refer to these five patents collectively as the patents-in-suit, or individually by the last three numbers of the patents.

Affymetrix further contends that Illumina's infringement was willful.

Affymetrix also contends that it is entitled to damages for Illumina's infringement in the form of lost profits on some Illumina sales and a reasonable royalty on other Illumina sales.

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<sup>14</sup> Affymetrix is considering whether and to what extent it can limit the number of claims to be tried in this case.

### **2.3 ILLUMINA'S CONTENTIONS**

Illumina contends that its products do not infringe literally or under the doctrine of equivalents any of the asserted claims of the patents-in-suit.

If Illumina is found to infringe, Illumina contends that Affymetrix is only entitled to a reasonable royalty on those accused products that Affymetrix has proven Illumina made, used, sold or offered for sale within the United States.

If Illumina is found to infringe, Illumina contends that such infringement was not willful.



## **2.4 SUMMARY OF PATENT ISSUES**

In this case, you must decide the issues according to the instructions I give you. In general these issues are:

1. Whether Affymetrix has proven by a preponderance of the evidence that Illumina has infringed any of the asserted claims of the patents-in-suit.
2. If you find that any of the asserted claims of the patents-in-suit are infringed, whether Affymetrix has proven by clear and convincing evidence that Illumina's infringement was willful.
3. If you find that any of the asserted claims of the patents-in-suit are infringed, the amount of damages that Affymetrix has proven by a preponderance of the evidence is due to it.

3. **THE PATENT CLAIMS**

3.1 **PATENT CLAIMS GENERALLY**<sup>15</sup>

SEE JOINT PROPOSED INSTRUCTION 3.1

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<sup>15</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**3.2 INDEPENDENT AND DEPENDENT CLAIMS<sup>16</sup>**

SEE JOINT PROPOSED INSTRUCTION 3.2

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<sup>16</sup> Source: Delaware Uniform Instructions; *Power Integrations* Final Instructions (modified).

### 3.3 OPEN ENDED OR “COMPRISING/COMPRISES” CLAIMS<sup>17</sup>

The claims of the patents-in-suit use the transitional term “comprising” or “comprises.” “Comprising” and “comprises” are interpreted the same as “including” or “containing.” In patent claims, “comprising” or “comprises,” mean that the claims are open ended. For example, a claim to a table comprising a tabletop, four legs and the glue, would be infringed by a table that includes those elements, even if the table also includes additional elements such as wheels on the table’s legs. Thus, if you find that the accused Illumina products or services include all the elements in any asserted claim that uses the term “comprising” or “comprises,” the fact that it may also include additional elements is irrelevant. The presence of additional elements does not mean that the Illumina product does not infringe a patent claim.

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<sup>17</sup> Source: Delaware Uniform Instructions (modified); Draft Uniform Jury Instructions For Patent Cases In The United States District Court For The District Of Delaware (June 2003) (hereinafter “2003 Draft Delaware Uniform Instructions”) (modified).

### 3.4 CONSTRUCTION OF CLAIMS<sup>18</sup>

It is the Court's duty under the law to define what patent claims mean. I have made my determinations and I will now instruct you on the meaning of the claims.

You must apply the meaning that I give in each patent claim to decide if the claim is infringed. You must ignore any different interpretations given to these terms by the witnesses or the attorneys. If I have not provided a specific definition for a given term or phrase, you are to use the ordinary English language meaning of that term.

It may be helpful to refer to the copy of the patents-in-suit that you have been given as I discuss the claims at issue here. The claims of the patents are toward the end of each patent.

You are advised that the following definitions for the following terms must be applied in the following patents-in-suit:

#### '243 Patent

- The term "**substrate**," as used in the claims of U.S. Patent No. 6,646,243, means "a material having a rigid or semi-rigid surface."
- The term "**target nucleic acids**," as used in the claims of U.S. Patent No. 6,646,243, means "nucleic acids that are deliberately exposed to the nucleic acids attached to the substrate."

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<sup>18</sup> Source: 2003 Draft Delaware Uniform Instructions (modified), *Power Integrations* Final Instructions; *Ncube v. Seachange*, CA 01-11, Final Jury Instructions

**'365 Patent**

- The phrase “**biological polymers immobilized on a surface**,” as used in the claims of U.S. Patent No. 6,399,365, means “two or more surface-immobilized biological polymers that are recognized by a particular target.”
- The term “**housing**,” as used in the claims of U.S. Patent No. 6,399,365, means “a structure that covers, protects, and supports the probe array.”

**'432 Patent**

- The phrase “**said beads being coded with an encoding system**,” as used in the claims of U.S. Patent No. 6,355,432, means “said beads having a property associated with each bead (separate from the binding polymer) that can be used to distinguish one bead from another.”
- The term “**target specific sequence**,” as used in the claims of U.S. Patent No. 6,355,432, means “a known polymer sequence that has affinity for another sequence.”

**'531 Patent**

- The term “**probe array**,” as used in the claims of U.S. Patent No. 5,545,531, means “a collection of probes, at least two of which are different, arranged in a spacially defined and physically addressable manner.”
- The phrase “**arranged in a spacially defined and physically addressable manner**,” as used in the claims of U.S. Patent No. 5,545,531, means “located in a particular location and capable of being addressed.”

**'716 Patent**

- The term “**probe**,” as used in the claims of U.S. Patent No. 5,795,716, means “a nucleic acid of known sequence that is capable of hybridizing to its complementary sequence.”
- The term “**probe intensity**,” as used in the claims of U.S. Patent No. 5,795,716, means “intensity from a labeled sample nucleic acid hybridized to a probe location.”
- The phrase “**indicating an extent of hybridization**,” as used in the claims of U.S. Patent No. 5,795,716, means “indicating the relative strength of binding.”
- The phrase “**comparison of said plurality of probe intensities to each other**,” as used in the claims of U.S. Patent No. 5,795,716, means “an examination of the probe intensities of two or more probes in relation to each other.”
- The phrase “**generates a base call identifying said unknown base**,” as used in the claims of U.S. Patent No. 5,795,716, means “determines which nucleotide is most likely to be present at a particular position in a nucleic acid sequence.”

#### 4. PATENT INFRINGEMENT

##### 4.1 PATENT INFRINGEMENT GENERALLY<sup>19</sup>

A patent owner may enforce its right to stop others from making, using, selling, or offering to sell the patented invention in the United States by filing a lawsuit for patent infringement. Here, Affymetrix, the patent owner, has sued Illumina, the accused infringer, and has alleged that Illumina's products and services infringe one or more claims of Affymetrix's patents-in-suit.

Patent law provides that any person or business entity which makes, uses, sells or offers to sell, without the patent owner's permission, any product, apparatus or method legally protected by at least one claim of a patent within the United States before the patent expires, infringes the patent.

There are several ways to infringe a patent. One may directly infringe a patent, either literally or under the doctrine of equivalents. Alternatively, one may indirectly infringe a patent, either (1) by inducing others to infringe a patent, in which case both the inducer and the direct infringer are liable for infringement; or (2) by contributing to the infringement of a patent by another by supplying a component specially designed for the patented invention, in which case both the direct infringer and the contributory infringer would be liable for patent infringement.

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<sup>19</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.



**4.2 DIRECT INFRINGEMENT – KNOWLEDGE OF PATENT OR INTENT  
TO INFRINGE IS IMMATERIAL<sup>20</sup>**

SEE JOINT PROPOSED INSTRUCTION 4.2

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Source: Delaware Uniform Instructions.

#### **4.3 LITERAL INFRINGEMENT<sup>21</sup>**

SEE JOINT PROPOSED INSTRUCTION 4.3

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<sup>21</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

#### 4.4 DOCTRINE OF EQUIVALENTS<sup>22</sup>

If you do not find literal infringement, you may consider infringement under the doctrine of equivalents. I have referred to the “doctrine of equivalents” before. Now it is time to explain this term.

As I have noted, to infringe a patent, every claim element must be present in the accused product. A claim element may be present in an accused product in one of two ways, either literally or under the doctrine of equivalents. A claim element is literally present if it exists in the accused product just as it is described in the claim, either as I have explained that language to you or, if I did not explain it, as you understand it from the evidence presented during trial.

A claim element is present in an accused product under the doctrine of equivalents if the differences between the claim element and a corresponding aspect of the accused product are insubstantial. One way to determine this is to look at whether or not the accused structure performs substantially the same function, in substantially the same way, to achieve substantially the same result as the element in the claimed invention.

Application of the doctrine of equivalents is on an element-by-element basis, meaning that for Illumina’s products or use of its products to infringe any one of Affymetrix’s asserted claims under the doctrine of equivalents, the element of a patent claim which is not literally present in the accused product must be present by equivalence. Therefore, the question is whether the accused product contains an equivalent for each element of the claim that is not literally present in the accused product. The question is not whether the accused product or

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<sup>22</sup> Source: *Power Integrations* Final Instructions; 2003 draft Delaware Uniform Instructions (modified).

method as a whole is equivalent to the claimed invention as a whole.

It is not a requirement under doctrine of equivalents infringement that those of ordinary skill in the art knew of the equivalent when the patent application was filed or when the patent issued. The question of whether Illumina's products or services are equivalent to what is defined in Affymetrix's claims is to be determined as of the time of the alleged infringement.

#### 4.5 INDIRECT INFRINGEMENT – GENERALLY<sup>23</sup>

In addition to stopping infringement by those who are directly infringing, a patent owner also has the right to stop those who are known as “indirect infringers.” There are two types of indirect infringers. First, there are those who encourage or induce others to infringe a patent; this is known as “inducing infringement.” Second, there are those who contribute to infringement by, for example, supplying them with components used in the patented invention. I will explain to you in a moment the precise requirements for finding someone has induced or contributed to infringement by another person.

In this case, Affymetrix accuses Illumina of inducing and contributing to the infringement of the patents-in-suit. It is your job to determine whether Affymetrix has proven inducement and/or contributory infringement by a preponderance of the evidence. Keep in mind that there can be no indirect infringement unless someone is directly infringing the patent. Thus, to prove that Illumina is inducing another person to infringe or contributing to the infringement of another, Affymetrix must prove by a preponderance of the evidence that Illumina or another person is directly infringing a claim of the patents. Such proof may be based on circumstantial evidence you have heard in this case, rather than direct evidence of infringement.

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<sup>23</sup> Source: *Power Integrations* Final Instructions; 2003 draft Delaware Uniform Instructions (modified).

#### 4.6 INDUCING PATENT INFRINGEMENT<sup>24</sup>

Inducement to infringe requires someone purposefully urging or encouraging another to infringe a patent – inducement to infringe cannot occur unintentionally. This is different from direct infringement, which, as I have told you, can occur without any intent to infringe. To be liable for inducement to infringe, the accused inducer must have known of the patent and actively encouraged or instructed another person how to use a product in a manner that you, the jury find infringes the asserted patent claims. Merely having knowledge of the underlying acts of direct infringement by itself is not enough to prove active inducement. For example, an accused inducer may be liable for inducing infringement if it provided instructions or directions to perform the infringing act through user manuals or other materials.

Thus, to prove that Illumina induced infringement of a patent-in-suit, Affymetrix must prove by a preponderance of the evidence the following three things:

1. Illumina actively encouraged or instructed another person how to use a product in a way you, the jury, find infringes the patent claims;
2. Illumina knew of the patent-in-suit;
3. The other person infringed an asserted claim of the patent-in-suit.

All three of these things must be proven by either direct or circumstantial evidence before you may find that Illumina induced patent infringement.

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<sup>24</sup>

Source: *Power Integrations* Final Instructions (modified); 2003 Draft Delaware Uniform Instructions (modified).

**4.7 CONTRIBUTORY INFRINGEMENT<sup>25</sup>**

SEE JOINT PROPOSED INSTRUCTIONS (AFFYMETRIX PROPOSED  
INSTRUCTION NO. 4.7, ILLUMINA PROPOSED INSTRUCTION NO. 4.9)

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<sup>25</sup> Source: *Power Integrations* Final Instructions; 2003 draft Delaware Uniform Instructions (modified).

#### 4.8 WILLFUL INFRINGEMENT<sup>26</sup>

Affymetrix contends that Illumina has willfully infringed the asserted claims of the patents-in-suit.

When a person becomes aware that a patent may have relevance to their activities, that person has a duty to exercise due care and investigate whether or not their activities infringe any valid claim of the patent. If that person does not do so and infringes the patent claims, then the infringement is willful.

Although, as I explained before, Affymetrix must prove infringement of the patents-in-suit by a preponderance of the evidence, Affymetrix's burden of proving that the infringement of the patents was willful is the higher burden of clear and convincing evidence. Therefore, if you find on the basis of the evidence and the law as I have explained it that Illumina's products and methods infringe at least one of the claims of the patents-in-suit, you must further decide whether Affymetrix has proven that Illumina's infringement was willful. To establish willful infringement, Affymetrix must prove two things with clear and convincing evidence:

1. Illumina was aware of the patent.
2. Illumina proceeded with its activities without having a reasonable good faith belief that the patent was invalid or that the patent was not infringed.

To determine whether Illumina acted with a reasonable good faith belief or whether Illumina willfully infringed a patent-in-suit, you must consider all of the facts, including the strength of the defenses raised by Defendant in this trial as well as the following factors:

1. In designing the product accused of infringement, whether Illumina intentionally copied Affymetrix's invention or a product made by Affymetrix that is covered by

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<sup>26</sup> Source: 2003 Draft Delaware Uniform Instructions (adapted).



the patents-in-suit, or whether Illumina instead tried to “design around” the patent by designing a product that Illumina believed did not infringe the patent claims. Evidence of copying is evidence of willful infringement; on the other hand, evidence of a good faith effort to “design around” the claims is evidence that the infringement was not willful.

2. When Illumina became aware of the patent, whether Illumina formed a good faith belief that the patent was invalid or that the patent was not infringed, including whether Illumina obtained and followed the advice of a competent lawyer. Although the absence of an opinion of counsel does not require you to find willfulness, the obtaining and following of counsel’s advice may be evidence that infringement was not willful.

Keep in mind that a determination by you that Illumina has infringed the patent does not automatically mean that the infringement was willful. As I have explained, the infringement is not willful if Illumina had a good faith belief that it did not infringe or that the patent was invalid, and if its belief was reasonable under all the circumstances.

## 5. DAMAGES

### 5.1 COMPENSATORY DAMAGES IN GENERAL<sup>27</sup>

If, after considering all of the evidence and the law as I have stated it, you have determined that all of the asserted claims are not infringed, your verdict should be for Illumina and you need go no further in your deliberations. On the other hand, if you decide that Illumina has infringed one or more of the patent claims, you must then turn to the issue of damages.

The patent laws provide that in the case of infringement of a patent claim, the owner of the patent shall be awarded damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer. Damages are compensation for all losses suffered as a result of the infringement.

The only relevant issue to the question of damages is the amount necessary to adequately compensate Affymetrix for infringement by Illumina. Adequate compensation should return Affymetrix to the position it would have occupied had there been no infringement.

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<sup>27</sup> Source: *Power Integrations* Final Instructions; Uniform Delaware Instructions(modified); 2003 Draft Delaware Uniform Instructions (modified).

## 5.2 BURDEN OF PROOF - REASONABLE CERTAINTY<sup>28</sup>

Affymetrix has the burden of proving damages by what is called a preponderance of the evidence. As you recall, that means that Affymetrix has to produce evidence that, when considered in the light of all the facts, leads you to believe that what Affymetrix claims is more likely true than not. To put it differently, if you were to put Affymetrix's and Illumina's evidence concerning damages on the opposite sides of a scale, the evidence supporting Affymetrix's claims would have to make the scales tip somewhat on its side. Affymetrix is entitled to all damages that can be proven with reasonable certainty. On the one hand, reasonable certainty does not require proof of damages with mathematical precision. Mere difficulty in ascertaining damages is not fatal to Affymetrix. On the other hand, Affymetrix is not entitled to speculative damages; that is, you should not award any amount of loss that, although possible, is wholly remote or left to conjecture. You may base your evaluation of reasonable certainty on opinion evidence. Any doubts regarding the computation of the amount of damages should be resolved against Illumina and in favor of Affymetrix.

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<sup>28</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions.

### 5.3 METHODS FOR COMPUTING DAMAGES<sup>29</sup>

There are two common methods for computing damages in a patent infringement case. One is called “lost profits,” and the other is called “reasonable royalty.” These are alternative methods for computing damages; you must award either lost profits or a reasonable royalty for each infringing sale made by the accused infringer. You cannot, however, award both lost profits and a reasonable royalty for the same sale.

In this case, Affymetrix is seeking lost profits in connection with some of Illumina’s sales. In connection with the remaining sales accused of infringement, Affymetrix is seeking only a reasonable royalty. For those remaining sales, you will only need to determine the damages based on a reasonable royalty. For the sales on which Affymetrix seeks lost profits, however, you must first determine if Affymetrix has proven its entitlement to lost profits for the sales on which it claims entitlement to lost profits. Only if you find that Affymetrix is not entitled to lost profits on some sales will you then determine Illumina’s damages for those sales based upon a reasonable royalty.

Lost profit damages are the profits Affymetrix lost because of the infringement. They are not profits that Illumina actually made. Affymetrix’s lost profits may be in several different forms, which I will explain in a moment. They include (i) lost sales, (ii) eroded prices for sales actually made; and (iii) eroded prices for future sales. Affymetrix must show that “but for” Illumina’s infringement, Affymetrix would have made the sales or profits it claims were lost.

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<sup>29</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions.

#### 5.4 LOST PROFITS - LOST SALES<sup>30</sup>

Affymetrix is claiming that it lost sales because of Illumina's infringement. In order to recover lost profits damages for lost sales, Affymetrix must show that "but for" Illumina's infringement, Affymetrix would have made the sales or profits that it claims were lost. One way Affymetrix can prove this is to show:

- (1) there was a demand for the patented product;
- (2) Affymetrix had the ability to meet the market demand;
- (3) no acceptable non-infringing substitutes were available; and
- (4) the amount of the profit it would have made.

If proposed competitive substitutes were available for some sales, Affymetrix can prove lost profits for those sales by showing (1) demand for the patented product; (2) that Affymetrix had the ability to meet the market demand for those sales; (3) proof of its market share; and (4) the amount of the profit it would have made.

Affymetrix need not negate every possibility that purchasers of Illumina's products might have bought another product. To be an acceptable non-infringing substitute, a proposed competitive substitute must have been acceptable to the actual purchasers of the infringing products.

In proving its damages, Affymetrix's burden of proof is not an absolute one, but rather a burden of reasonable probability. If it is reasonably probable that Affymetrix would have made some of the infringing sales, and it is reasonably probable what amount Affymetrix would have profited from the denied sales, then Illumina is liable for the lost profits on those infringing

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<sup>30</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions; *State Indus., Inc. v. Mor-Flo Indus., Inc.* 883 F.2d 1573 (Fed. Cir. 1989).

sales. The infringer is not liable, however, for speculative profits.

## 5.5 LOST PROFITS - PRICE EROSION<sup>31</sup>

In this case Affymetrix is requesting damages based on price erosion. “Price erosion” occurs when the patentee is forced to lower prices due to the presence in the market of the infringing product. Specifically, Affymetrix asserts that it lowered its prices for certain of its products, was unable to increase its prices, and will be unable to raise prices for some period of time in the future, all allegedly because of Illumina’s infringement.

If you determine that the prices of Affymetrix’s products were eroded, you must then consider whether any such price erosion resulted because Illumina was in the market or because of some other reason.

Ultimately, to recover price erosion damages, Affymetrix must prove that “but for” Illumina’s competition, it would not have lowered its prices or would have been able to increase its prices.

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<sup>31</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions.

## 5.6 REASONABLE ROYALTY<sup>32</sup>

If you find that Affymetrix is not entitled to lost profits on some infringing sales, then Affymetrix is entitled to a reasonable royalty on those sales. A reasonable royalty is the minimum permissible measure of damages set by the patent laws and is not necessarily the actual measure of damages. Rather, it is the floor below which damages should not fall. Accordingly, you may find damages in excess of a reasonable royalty if you find that the facts so warrant.

A reasonable royalty in this case is the amount of money that would be agreed to in a hypothetical arm's-length negotiation between Affymetrix and Illumina, with both operating under the assumption that the negotiated patents are valid and are being infringed by Illumina's products or methods of using its products.

The reasonable royalty must be calculated as of the point in time just prior to when infringement began.

In the hypothetical arm's-length negotiation, you must assume that the person negotiating on behalf of Illumina, and who was willing to take a license, would have known that Affymetrix's patents were valid and infringed by Illumina. You should also assume that both Affymetrix and Illumina knew all pertinent information at the time of the hypothetical negotiations.

Having that in mind, you may consider any relevant fact in determining the reasonable royalty for Illumina's use of the patented invention, including the opinion testimony of experts.

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<sup>32</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions.



**5.7 FACTORS FOR DETERMINING REASONABLE ROYALTY<sup>33</sup>**

SEE JOINT PROPOSED INSTRUCTIONS (AFFYMETRIX PROPOSED  
INSTRUCTION NO. 5.7, ILLUMINA PROPOSED INSTRUCTION NO. 7.12)

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<sup>33</sup> 2003 Draft Delaware Uniform Instructions.

**5.8 INTEREST<sup>34</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. 5.8, ILLUMINA PROPOSED INSTRUCTION NO. 7.13

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<sup>34</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**5.9 CLOSING STATEMENT - DAMAGES<sup>35</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. 5.9, ILLUMINA PROPOSED INSTRUCTION NO. 7.14

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<sup>35</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**5.10 CURATIVE INSTRUCTION<sup>36</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. 5.10, ILLUMINA PROPOSED INSTRUCTION NO. 7.16

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<sup>36</sup> Source: *Power Integrations* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**6. DELIBERATION AND VERDICT**

**6.1 INTRODUCTION<sup>37</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. 6.1, ILLUMINA PROPOSED INSTRUCTION NO. 9.1

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<sup>37</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**6.2 UNANIMOUS VERDICT<sup>38</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTIOIN NO. 6.2, ILLUMINA PROPOSED INSTRUCTION NO. 9.2

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<sup>38</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**6.3 DUTY TO DELIBERATE<sup>39</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. 6.3, ILLUMINA PROPOSED INSTRUCTION NO. 9.3

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<sup>39</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.

**6.4 COURT HAS NO OPINION<sup>40</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. 6.4, ILLUMINA PROPOSED INSTRUCTION NO. 9.4

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<sup>40</sup> Source: *Power Integrations* Final Instructions; Delaware Uniform Instructions.



**X. VALIDITY DEFENSES**

**X.1 VALDITY<sup>41</sup>**

Illumina contends that all of the asserted claims of the five patents-in-suit are invalid for failure to satisfy the statutory requirements of patentability. In particular, Illumina contends that asserted claims are invalid for [list of invalidity defenses to be completed]

I will now instruct you on each of these defenses.

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<sup>41</sup> Source: 2003 Draft Delaware Uniform Instructions. Final Jury Instructions; *Tristrata Technology, Inc. v. Mary Kay, Incorporated*, C.A. No. 01-127-JJF (hereafter “*Tristrata* Final Instructions”).

**X.2 PRESUMPTION OF VALIDITY<sup>42</sup>**

The granting of a patent by the Patent Office carries with it the presumption that the patent is valid. The law presumes, in the absence of clear and convincing evidence to the contrary, that the Patent Office acted correctly in issuing the patent. Nevertheless, once the validity of a patent has been put in issue, it is the responsibility of the jury to review what the Patent Office has done consistent with these instructions on the law.

This presumption of validity puts the burden of proving invalidity on Illumina. While the presumption can be rebutted, the burden is on Illumina to do so. This burden requires that Illumina prove by clear and convincing evidence that an asserted method claim is invalid. Clear and convincing evidence is evidence that produces an abiding conviction that the truth of the factual contention is highly probable. Proof by clear and convincing evidence is a higher burden than proof by a preponderance of the evidence.

Each of the asserted claims is presumed valid independently of the validity of each other claim.

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<sup>42</sup> Source: 2003 Draft Delaware Uniform Instructions.

### X.3 ENABLEMENT<sup>43</sup>

Illumina contends that certain claims of the patents-in-suit are invalid because the patent specification lacked an enabling disclosure.

Patent law requires that the disclosure or written description portion of a patent be sufficiently detailed to enable those skilled in the art to practice the claimed invention. The purpose of this requirement is to ensure that the public, in exchange for the patent rights given to the inventor, obtains from the inventor a full disclosure of how to carry out the invention. However, the patent disclosure need not provide information that is within the knowledge of one of ordinary skill in the art or that can be determined with routine testing.

To meet the enablement requirement, the patent disclosure must allow a person of ordinary skill in the art to practice the claimed invention without undue experimentation. Because descriptions in patents are addressed to those skilled in the art to which the invention pertains, an applicant for a patent need not expressly include information that is commonly understood by persons skilled in the art. In other words, the disclosure in the patent must not necessarily describe how to make and use every possible variation of the claimed invention — the person of ordinary skill in the art's knowledge can fill in missing information. Similarly, a patent specification need not contain a working example so long as the patent discloses enough information to enable a person of ordinary skill in the art to practice the invention. The fact that some experimentation may be required for a skilled person to practice the claimed invention does not mean that the specification is not enabling. Experimentation or testing that is routine in the industry is permissible. Indeed, a considerable

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<sup>43</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions (adapted).

amount of experimentation is permissible, if it is merely routine, or if the specification provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed. A specification is enabling so long as the experimentation needed is not undue.

Factors to be considered in determining whether a disclosure would require undue experimentation include: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance disclosed in the patent; (3) the presence or absence of working examples in the patent; (4) the nature of the invention; (5) the state of the prior art; (6) the relative skill of those in the art; (7) the predictability or unpredictability of the art; and (8) the breadth of the claims.

**X.4 WRITTEN DESCRIPTION<sup>44</sup>**

Illumina contends that certain claims of the patents-in-suit are invalid because they lack an adequate written description.

The patent law requires that a patent application contain an adequate written description of the invention to ensure that the inventor was in possession of the invention at the time the patent application was filed. In other words, the specification must describe the invention with reasonable clarity to convey to persons of ordinary skill in the art that the inventor was in possession of the claimed invention. An adequate written description exists for whatever was described in the patent application, including whatever was described by the claims.

To meet the requirement of providing a description of the patented invention, the patent application must adequately describe the invention as it was finally claimed in the issued patent. That is, to prove a claim invalid for lack of an adequate written description, Illumina must prove by clear and convincing evidence that the patent application does not reasonably convey to a person of ordinary skill in the art that the inventors had possession of the invention (at the time of the application) as that invention was finally claimed in the issued patent. No particular form of written description is required.

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<sup>44</sup> Source: 2003 Draft Delaware Uniform Instructions.

**X.5 ANTICIPATION -- GENERALLY<sup>45</sup>**

Illumina contends that the inventions covered by certain claims of the patents-in-suit are invalid because they are not new. A person cannot obtain a patent on an invention if someone else has already made the same invention. If the invention is not new, we say that it was “anticipated” by prior art. Prior art is the legal term used to describe what others had done in the field before the invention was made, and may include things such as articles, books and other patents. It is not necessary that the prior art has been available to every member of the public. It must have been available, without restriction, to that segment of the public most likely to avail itself of the prior art’s contents.

An invention that is “anticipated” by the prior art is not entitled to patent protection. In order to prove that an invention is “anticipated,” Illumina must prove by clear and convincing evidence that a single piece of prior art describes or discloses all of the elements of the claimed invention. If a piece of prior art was before the Patent Office during prosecution of the patent, there is a particularly heavy burden in establishing invalidity.

There cannot be an accidental or unrecognized anticipation. A prior duplication of the claimed invention that was accidental, or unrecognized, unappreciated and incidental to some other purpose, is not an invalidating anticipation.

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<sup>45</sup> Source: 2003 Draft Delaware Uniform Instructions (adapted); *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1467 (Fed. Cir. 1990).

**X.6 DATE OF INVENTION<sup>46</sup>**

Two of the different categories of prior art refer to the date at which the inventors made the invention, this is called the "date of invention,"

Under the patent laws, the date of invention is generally the date that the patent application was filed. This is also referred to as a "constructive reduction to practice." In this case, the date is [*to be completed for each patent*]. Ordinarily, art dated before the application filing date is prior art to the patent claims.

To prove a date of invention earlier than the filing date, Affymetrix must show that there was an earlier reduction to practice or an earlier conception followed by a diligent reduction to practice. Conception requires proof that the inventors formed in their minds a definite and permanent idea of the complete and operative invention and that the idea be so clearly defined in the inventors' minds that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation. If Affymetrix seeks to show conception through oral testimony of the inventors, it must also produce independent evidence corroborating that testimony. Such evidence is to be evaluated under a rule of reason. To prove actual reduction to practice of a method, an inventor must establish that he actually performed the method and obtained the results. The inventor must also have contemporaneous recognition and appreciation of the invention represented by the claims.

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<sup>46</sup> Source: *Tristrata* Final Jury Instructions.

**X.7 PRIOR ART -- GENERALLY<sup>47</sup>**

A reference must be enabling to be considered prior art. As I stated earlier, enablement means that the disclosure or written description portion of a reference must be sufficiently detailed to enable those skilled in the art to practice the invention.

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<sup>47</sup> Source: *Tristrata* Final Jury Instructions.



**X.8 PRIOR PUBLICATION<sup>48</sup>**

Illumina contends that certain claims of the patents-in-suit were anticipated because the invention defined in those claims was described in a prior publication, such as an article, book or another patent. A patent claim may be anticipated and invalid if the entire invention defined by that claim was described in a printed publication either: (i) before Affymetrix made its invention; or (ii) more than one year before the effective filing date of Affymetrix's patent application.

For a printed publication to anticipate a claim of a patent-in-suit, Illumina must show by clear and convincing evidence that the printed publication, when read by a person of ordinary skill in the art, embodies or discloses each element of the claim. The disclosure must be complete enough to enable one of ordinary skill in the art to practice the invention, without undue experimentation. In determining whether the disclosure is enabling, you should take into account what would have been within the knowledge of a person of ordinary skill in the art at the time, and you may consider expert testimony and other publications that shed light on the knowledge such a person would have had at that time.

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<sup>48</sup> Source: *Tristrata* Final Instructions (adapted); 2003 Draft Delaware Uniform Instructions (adapted).

**X.9 OBVIOUSNESS<sup>49</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. X.9, ILLUMINA PROPOSED INSTRUCTION NO. 5.13

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<sup>49</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**X.10 SCOPE AND CONTENT OF THE PRIOR ART<sup>50</sup>**

In arriving at your decision on the issue of whether or not the claimed invention is obvious to one of ordinary skill in the art, you must first determine the scope and content of the prior art. This means that you must determine what prior art is reasonably pertinent to the particular problem the inventor faced. Prior art is reasonably pertinent if it is in the same field as the claimed invention or is from another field that a person of ordinary skill would look to in trying to solve the problem the named inventor was trying to solve. Prior art includes the following:

1. Patents, articles, books or any other type of printed publication publicly available before [*to be completed for each patent*];
2. Anything in public use or on sale in the United States before [*to be completed for each patent*]; and
3. Anything that was publicly known or used by others in this country before the date of invention of the patents-in-suit.

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<sup>50</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions (adapted)

**X.11 DIFFERENCES OVER THE PRIOR ART<sup>51</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. X.11, ILLUMINA PROPOSED INSTRUCTION NO. 5.15

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<sup>51</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**X.12 LEVEL OF ORDINARY SKILL<sup>52</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. X.12, ILLUMINA PROPOSED INSTRUCTION NO. 5.16

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<sup>52</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions.

### **X.13 MOTIVATION TO COMBINE<sup>53</sup>**

Once the prior art is assembled and considered, you should determine whether the prior art, considered as a whole, suggests the claimed invention. Prior art references may be combined to show obviousness if there is some motivation or suggestion to combine the references and if the combination would be reasonably likely to achieve the goal of the invention. Both the suggestion or motivation to combine and the expectation of success must be found in the prior art

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<sup>53</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**X.14 OBVIOUSNESS -- HINDSIGHT<sup>54</sup>**

The question of obviousness is simple to ask but difficult to answer. A person of ordinary skill in the art is presumed to have knowledge of the relevant prior art at the time of the patentee's invention. If you find the available prior art shows each of the elements of the claims in suit, you must determine whether it would then have been obvious to a person of ordinary skill in the art to combine or coordinate these limitations in the same manner as the claims in suit.

The difficulty that attaches to all honest attempts to answer this question can be attributed to the strong temptation to rely on hindsight while undertaking this evaluation. It is wrong to use the patent-in-suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Rather, you must cast your mind back to the time of the invention and consider only the thinking of one of ordinary skill in the art, guided only by the prior art and what was known in the field.

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<sup>54</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**X.15 OBJECTIVE CRITERIA CONCERNING OBVIOUSNESS<sup>55</sup>**

SEE JOINT PROPOSED INSTRUCTIONS – AFFYMETRIX PROPOSED  
INSTRUCTION NO. X.15, ILLUMINA PROPOSED INSTRUCTION NO. 5.19

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<sup>55</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions (adapted).



**X.16 OBVIOUS TO TRY<sup>56</sup>**

The evidence might indicate to you that what the inventors did was obvious to try. If so, this does not indicate the patent is invalid for obviousness. “Obvious to try” is not the standard; rather, it is whether the invention as a whole would have been obvious to those of ordinary skill in the pertinent art at the time he or she made the invention.

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<sup>56</sup> Source: *Tristrata* Final Instructions; 2003 Draft Delaware Uniform Instructions.

**XX. INTENTIONAL INTERFERENCE WITH PROSPECTIVE ECONOMIC ADVANTAGE<sup>57</sup>**

I will now instruct you regarding Illumina's cause of action for intentional interference with<sup>58</sup> prospective economic advantage.

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<sup>57</sup> Illumina also maintains a cause of action for unfair competition under California's Business and Professions Code section 17200 *et seq.* A jury instruction is not appropriate for this claim because "A UCL action is equitable in nature; damages can not be recovered." *Korea Supply Co. v. Lockheed Martin Corp.*, 29 Cal. App. 4<sup>th</sup> 1134, 1143 (2003). There is no right to a jury trial on a unfair competition law claim. *Hodge v. Superior Court*, 145 Cal. App. 4<sup>th</sup> 278, 284-87 (YEAR).

<sup>58</sup> Illumina has proposed an instruction for intentional interference with contract. "[A] cause of action for intentional interference with contract requires an underlying enforceable contract." As there are no existing, enforceable contracts in connection with Illumina's counterclaims "only a claim for interference with prospective economic advantage may be pleaded." *PMC, Inc. v. Saban Entertainment, Inc.* 45 Cal. App. 4<sup>th</sup> 579, 601 (1996).

**XX.1 INTENTIONAL INTERFERENCE WITH PROSPECTIVE RELATIONS:  
ELEMENTS<sup>59</sup>**

Illumina claims that Affymetrix intentionally interfered with an economic relationship between it and [INSERT NAME OF THIRD PART(IES)]<sup>60</sup> that probably would have resulted in an economic benefit to Illumina. To establish this claim, Illumina must prove all of the following:

1. That Illumina and [INSERT NAME OF THIRD PART(IES)] were in an economic relationship that probably would have resulted in an economic benefit to Illumina;
2. That Affymetrix knew of the relationship;
3. That Affymetrix intended to disrupt the relationship;
4. That Affymetrix engaged in wrongful conduct through monopolization or attempted monopolization under Section 2 of the Sherman Act.<sup>61</sup>
5. That the relationship was disrupted;
6. That Illumina was harmed; and
7. That Affymetrix' wrongful conduct was a substantial factor in causing Illumina's harm.

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<sup>59</sup> Source: Judicial Council of California Civil Jury Instructions, Fall 2006 Ed., Inst. No. 2202.

<sup>60</sup> Illumina has incorrectly omitted from its proposed instruction the name of the third parties or parties about which it makes this claim. As such third parties have not been identified to Affymetrix, Affymetrix is unable to insert them in its proposed instruction.

<sup>61</sup> FN3 Illumina has incorrectly omitted from its proposed instruction the statement of the grounds of wrongfulness of the conduct. However, "the Court must specifically state for the jury the conduct that the judge has determined as a matter of law would satisfy the "wrongful conduct" standard. Judicial Council of California Civil Jury Instructions, Fall 2006 Ed., Inst. No. 2202, Footnote re: Directions for Use.

## **XX.2 PRIVILEGE OF COMPETITION<sup>62</sup>**

Ordinarily, a person who engages in business with the primary aim of making profits for himself or herself is not liable for business losses suffered by a competitor. The privilege of competition is an affirmative defense to a claim of interference with prospective economic advantage.

The essential elements of the privilege of competition are:

1. Illumina and Affymetrix were engaged in economic competition;
2. The economic relationship between Illumina and [INSERT NAME OF THIRD PART(IES)]<sup>63</sup> concerns a matter involved in the competition between Illumina and Affymetrix;
3. Affymetrix did not use wrongful means;
4. Affymetrix's purpose was at least in part to advance its interest in competing with Illumina; and
5. Affymetrix's actions did not create or continue an unlawful restraint of trade.

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<sup>62</sup> Source: California Civil Jury Instructions (BAJI) Fall 2006 Ed., No. 7.86

<sup>63</sup> Illumina must identify the third parties as to which it is stating its claim.

### **XX.3 PRIVILEGE OF FREE COMPETITION<sup>64</sup>**

Free competition is also privilege that can be proven by Affymetrix as an affirmative defense. The policy of the law has always been in favor of free competition. If Illumina's contractual relations are contemplated or potential, it is in the public interest for any competitor to be free to divert such relations to itself by all fair and reasonable means.

Where the interference by a competitor involves no more than recognized trade practices, such as advertising, solicitation, or price competition, then losses incurred a result of such competition are not recoverable.

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<sup>64</sup> See *San Francisco Design Center Assoc. v. The Portman Co.*, 41 Cal. App. 4<sup>th</sup> 29, N. 7 (1995).

**XX.4 WRONGFUL CONDUCT – DEFINED<sup>65</sup>**

“Wrongful Conduct” is conduct that is wrongful separate and apart from the fact that the conduct interfered with or disrupted the economic relationship between Illumina and [INSERT NAME OF THIRD PART(IES)]<sup>66</sup>, and is also wrongful in the sense that the conduct violated a statute.

In this case, Illumina asserts that Affymetrix engaged in conduct that constituted a violation of Section 2 of the Sherman Act. In order to find that Affymetrix’s conduct was wrongful, you must find that it violated Section 2 of the Sherman Act.

I will instruct you next regarding the essential elements of a violation of Section 2 of the Sherman Act.

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<sup>65</sup> Source: Judicial Council of California Civil Jury Instructions (BAJI), Fall 2006 Ed., Inst. No. 7.86.1. Wrongful conduct must be defined for the jury; *Id.*, Inst. No. 7.82; Judicial Council of California Civil Jury Instructions, Fall 2006 Ed., No. 2202.

<sup>66</sup> Illumina must identify the third part(ies) as to which it is asserting this claim.

**XX.5 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT, GENERALLY: NATURE OF THE CLAIM<sup>67</sup>**

Illumina claims that Affymetrix has violated section 2 of the Sherman Act by willfully and intentionally acquiring a monopoly in the genotyping market of the microarray industry.

The purpose of the Sherman Act is:

- (1) to preserve and advance our system of free, competitive enterprise;
- (2) to encourage, to the fullest extent practicable, free and open competition in the marketplace; and
- (3) to prevent the accomplishment of a monopoly in any business or industry all to the end that the consuming public may receive better goods and services at a lower cost.

Any unreasonable interference, by contract, or combination, or conspiracy, with the ordinary, usual, and freely competitive pricing or distribution system of the open market in interstate trade or commerce, constitutes an unreasonable restraint of interstate trade, and is a violation of the federal antitrust laws.

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<sup>67</sup> Source: O'Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.01

**XX.6 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: STATUTE DEFINING THE CLAIM<sup>68</sup>**

Section 2 of the Sherman Act (15 U.S.C. § 2) provides that:

Every person who shall monopolize, or attempt to monopolize, . . . or conspire with any other person to . . . monopolize any part of the trade or commerce . . . shall be . . . guilty of a violation of the antitrust laws.

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<sup>68</sup> Source: O'Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.10



**XX.7 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: MONPOLIZATION<sup>69</sup>**

Illumina alleges that Affymetrix has violated federal antitrust laws by monopolizing and attempting to monopolize interstate trade and commerce in the DNA microarray industry. There are four essential elements that Illumina must prove in order to establish its claim that Affymetrix has monopolized within the meaning of the antitrust laws:

1. That the relevant markets applicable to this claim are the whole genome genotyping and the focused genome genotyping microarray markets, as claimed by Illumina;
2. That if so, Affymetrix possessed monopoly power in that market;
3. That if so, Affymetrix did one or more of the acts claimed by Illumina and thereby monopolized the market; and
4. That if so, such monopolization directly and proximately caused damages to the business or property of Illumina by causing Illumina to lose sales on which it would have made a profit.

The burden is on Illumina to establish each of these elements by a preponderance of the evidence.

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<sup>69</sup> Source: O'Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.30

**XX. 8 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: WILLFUL AND INTENTIONAL ACQUISITION AND MAINTENANCE OF A MONOPOLY<sup>70</sup>**

**§150.31 Willful and Intentional Acquisition and Maintenance of Monopoly**

The mere possession of monopoly power is not sufficient to support a finding of monopolization, unless it is also determined that the monopoly power was willfully and intentionally acquired and maintained. A person who acquires monopoly power through normal growth and development, as a consequence of having a superior product, or business acumen, or through historical accident, is not guilty of monopolization as defined in this charge.

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<sup>70</sup> Source: O'Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.31

**XX.9 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: ATTEMPTED MONOPOLIZATION<sup>71</sup>**

**§150.32 Attempted Monopolization**

There are five essential elements that Illumina must prove in order to establish that Affymetrix was liable for attempted monopolization within the meaning of the antitrust laws:

1. That the relevant markets applicable to this claim are the whole genome genotyping and focused genotyping microarray markets, as claimed by Illumina;
2. That Affymetrix had a specific intent to monopolize such relevant markets;
3. That one or more of the acts claimed by Illumina was done, was wrongful, and was in furtherance of that intent, even though insufficient to actually produce the intended monopoly;
4. That both elements – the intent and the act – must appear and must together result in a reasonable probability that monopolization will sooner or later occur; and
5. That if so, the attempted monopolization so established was the proximate cause of damage to the business or property of Illumina, by causing Illumina to lose sales on which Illumina would have made a profit.

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<sup>71</sup> Source: O'Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.32

**XX.10 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: DEFINITIONS: PERSON<sup>72</sup>**

**§150.60 Person**

The word “person” includes not only every individual, but also every corporation, partnership and every other organization, of any kind.

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<sup>72</sup> Source: O’Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.60

**XX.11 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: DEFINITIONS: IN RESTRAINT OF TRADE<sup>73</sup>****§150.61 In Restraint of Interstate Trade**

The phrase “in restraint of trade or commerce among the several States, or with foreign nations” means in restraint of trade and commerce that takes place between persons or business organizations in one state and those in another state, that is to say, trade and commerce that moves or flows or takes place, not wholly within the boundaries of a single state, but across state lines from one state into one or more other states. To restrain interstate trade and commerce means to interfere unreasonably with the ordinary, usual, and freely-competitive pricing or distribution system of the open market in interstate trade and commerce.

The amount or quantity or value of the interstate commerce involved or affected by an unreasonable restraint of trade is immaterial. The Sherman Act brands as unlawful any contract or combination of conspiracy that would operate to restrain unreasonably any interstate trade and commerce, regardless of how small in amount or quantity or value.

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<sup>73</sup> Source: O’Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.61

**XX.12 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: DEFINITIONS: INTERSTATE COMMERCE<sup>74</sup>**

**§150.62 Interstate Commerce**

The term “interstate commerce” refers to business transacted across state lines or between persons or corporations having their residences or businesses in different states. It differs from intrastate commerce, which is business done within a single state.

There can be no violation of the law unless you determine that the activities of Affymetrix as challenged by Illumina have actually occurred in interstate commerce or, if done within this state, that such activities constituted a restraint on interstate commerce involving a not insubstantial amount of such commerce. In other words, it is not necessary that the disputed transactions be shown to be interstate transactions in and of themselves so long as such transactions are shown to have affected interstate commerce in a substantial way.

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<sup>74</sup> Source: O’Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.62

**XX.13 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: DEFINITIONS: INTENT<sup>75</sup>**

**§150.63 Intent**

Intent ordinarily may not be proved directly because there is no way of understanding or scrutinizing the operations of the human mind. But you may infer a person's intent from surrounding circumstances. You may consider any statement made or act done or omitted by a party whose intent is in issue, and all other facts and circumstances that indicate the party's state of mind.

You may consider it reasonable to draw the inference and find that a person intends the natural and probable consequences of acts knowingly done or knowingly omitted. It is for you to decide what facts have been established by the evidence.

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<sup>75</sup> Source: O'Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.63

**XX.14 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: DEFINITIONS: MONOPOLIZE<sup>76</sup>**

**§150.64 Monopolize**

The term “monopolize” as used in the federal antitrust laws, means the power either to obtain, or to maintain, the power to remove or exclude competitors from the field of competition in a particular business or industry.

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<sup>76</sup> Source: O’Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.64



**XX.15 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: DEFINITIONS: RELEVANT MARKET<sup>77</sup>****§150.64 Relevant Market**

Before it can be determined whether a person has monopolized a field of competition in a particular line of trade or commerce, it must first be determined what is the “area of effective competition” applicable in this case. In antitrust law, this is known as defining what is called the “relevant market.” Charges of monopolization can only be judged in the framework of the relevant market.

The relevant markets that Illumina claims apply in this claim are the whole genome genotyping microarray market and the focused genome genotyping microarray market. Therefore, Illumina must prove by a preponderance of the evidence that the relevant markets are the whole genome genotyping microarray market and the focused genome genotyping microarray market. .

In determining a relevant market, the “area of effective competition” must be determined by reference to: (1) a product market and, (2) a geographic market.

First, in determining the product market, the basic idea is that the products within it are interchangeable as a practical matter from the buyer’s point of view. This does not mean that two products must be identical to be in the same relevant market. It means that they must be, as a matter of practical fact and the actual behavior of consumers, substantially or reasonably interchangeable to fill the same consumer needs or purposes. Two products are within a single market if one item could suit buyers’ needs substantially as well as the other. In sum, what you are being asked to do is to decide which products compete with each other.

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<sup>77</sup> FN1 Source: O’Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.66

Second, the relevant geographic market generally consists of the area or areas in which these parties and their competitors compete for sales in the relevant product market. In some instances, the geographic market may be national or international, under other circumstances it may be as small as a single metropolitan area. The geographic market selected must both correspond to the commercial realities of the industry and be economically significant.

**XX.16 WRONGFUL CONDUCT: VIOLATION OF SECTION 2 OF THE SHERMAN ACT: DEFINITIONS: CAUSATION<sup>78</sup>**

**§150.70 Proximate Cause**

An injury or damage is proximately caused by an act, or a failure to act, whenever it appears from the evidence in the case that the act or omission played a substantial part in bringing about or actually causing the injury or damage, and that the injury or damage was either a direct result or a reasonably probable consequence of the act or omission.

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<sup>78</sup> Source: O'Malley et al., *Federal Jury Practice & Instructions*, 5<sup>th</sup> Ed. § 150.70

**XX.17 INTERFERENCE WITH PROSPECTIVE ECONOMIC ADVANTAGE:  
DAMAGES<sup>79</sup>**

If you find that Illumina is entitled to a verdict against Affymetrix based upon a claim of interference with prospective economic advantage, you should then award Illumina damages in an amount that will reasonably compensate Illumina for all loss or harm, providing you find it was suffered by Illumina and caused by Affymetrix's conduct.

The amount of your award should include financial loss of the benefits of the prospective economic relationship.

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<sup>79</sup> Source: California Civil Jury Instructions (BAJI), Fall 2006 Ed., Inst. No. 7.89.

CERTIFICATE OF SERVICE

I hereby certify that on February 5, 2007, I electronically filed the foregoing document using CM/ECF which will send notification of such filing(s) to the following:

Richard K. Herrmann  
Morris James LLP

I also certify that copies were caused to be served on February 5, 2007 upon the following in the manner indicated:

**BY HAND**

Richard K. Herrmann  
Morris James LLP  
500 Delaware Avenue, Suite 1500  
P.O. Box 2306  
Wilmington, DE 19801-1494

**BY FEDERAL EXPRESS (as of February 6, 2007)**

Marcus E. Sernel  
Kirkland & Ellis LLP  
200 East Randolph Drive  
Chicago, IL 60601

/s/ Derek Fahnestock (#4705)

Derek Fahnestock (#4705)  
dfahnestock@mnat.com